

REMARKS

Claims 1-51 were filed with the application. Claims 1-11, 23-32 and 44-51 have been withdrawn based upon a restriction requirement (discussed in the prior response and made final in the present action). Claims 12-22 and 33-43 remain under consideration at the time of the present action. Claim 16 has been cancelled above. Claims 19 and 36 have been withdrawn as part of the response herein. Claims 12, 22, 33, 35 and 37 have been amended above.

In the present action, claims 16, 19 and 36 are objected to as being indefinite. It is the examiner's position that these claims do not read on the elected species, as shown in Figs. 14-18, 19A and 19B.

In response to this objection, claim 16 has been cancelled (without prejudice to its reintroduction at a later time or in a divisional application). Thus, the objection is now moot. As for the objections to claims 19 and 36, these claims have now been classified as being withdrawn from consideration. Although the original restriction classified these claims as being part of Group IV, it would appear that both are readable on Group V, Figs. 20-24. (It is also asserted that claim 36 is readable on Group 1, Figs. 1-3.)

It is recognized that the restriction has been made final in the present action. However, it should be noted that claims 19 and 36 are dependant claims that each read on the Group V embodiment shown in Figs 20-24. It is respectfully submitted, again, that the corresponding independent claims are readable on both the Group IV and Group V embodiments. Thus, these claims are generic to these two embodiments. The present action does not acknowledge the generic status of these claims or other claims in the application. This status should be acknowledged at this time, regardless of the current rejection of these claims based on anticipation or obviousness.

ARGUMENTS

In the present action, Claims 12-22 stand rejected as being anticipated by Adams et al (US 4,853,823). In addition, claims 33-36 stand rejected as being obvious in view of Adams. It is respectfully submitted, however, that the Adams reference does not suggest or disclose the specific combination claimed.

Claim 12, as presently presented, defines a yarn catch insert for insertion into an elongated hole formed through a yarn winding tube having an inside surface, an outside surface, and an extended side surface. A portion of the side surface of the insert is positioned opposite the portion of the side surface of the hole when the insert is inserted into the hole. The placement of the insert into the hole in the tube forms a start-up groove that is extended in the circumferential direction of the tube and that is formed between the adjacent portions of the side surface of the insert and the hole in the tube. At least a portion of the extended start-up groove is tapered in a circumferential direction. Claim 33 is directed specifically to the tube for accepting a yarn catch insert, for example, of the type that defined in claim 12, wherein a non-symmetrical hole is formed in the wall of the tube. Claim 22 defines a combination of a yarn catch insert and a tube, wherein the yarn catch insert is inserted into a circumferentially extending hole that is formed in the tube and wherein the side portions of the insert and the tube form a tapered start-up groove extending around a portion of the circumference of the tube.

The Adams patent as cited in the present action shows a yarn tube having a circular hole formed in an end of the tube with a resilient insert positioned within the hole. A V-shaped notch is formed in the end of the tube that communicates in an axial direction with the circular opening. The yarn is caught by the resilient member after insertion into the V-shaped notch from the axial end of

the tube. Thus, the start-up groove in Adams is not formed in the circumferential surface of the tube, but is formed in the axial end of the tube. Further, the circular hole in the tube is not extend and is not elongated in the circumferential direction. The hole in Adams does not form, in combination with the resilient insert, a circumferentially directed tapered groove. The resilient insert in Adams completely fills the hole. The V-shaped slot in Adams is formed adjacent the circular opening and is formed in the end of the tube. The combination of the V-shaped slot and the circular opening are positioned axially and not circumferentially. There is no tapered groove formed by the resilient insert and the V-shaped notch. Thus, the Adams reference does not suggest or disclose the specifically claimed combination in claim 12, in claims that depend from claim 12 or in independent claim 22.

With specific reference to claim 33, the yarn winding tube includes a non-symmetrical hole extending in the circumferential direction that is adapted to accept a yarn catch insert. The resilient insert in the Adams reference is positioned in a circular opening in the tube. The V-shaped notch and the circular hole are positioned axially along the tube. Thus, there is no hole in Adams that extends circumferentially in the tube wall, as claimed. Because of this difference, claim 33 and its dependant claims are not suggested or disclosed by the Adams reference. (This same argument applies to independent claim 22, which define the circumferentially extending hole in the tube wall that receives the yarn catch insert.)

For the reasons expressed above, claims 12-15, 17-22 and 33-35, as amended, are not suggest or disclosed by Adams.

Claims 37-40 and 43 stand rejected in the current action based upon the combination of Dunlap (US 2,679,989) and either Powel et al (US 4,901,941) or Adams. This rejection is also respectfully traversed.

The yarn carrier of independent claim 37, and its corresponding dependant claims, is defined by the inner and outer tubes that are disposed over one another. Each of the tubes has a circumferentially extending hole in the tube wall. When the two tubes are positioned together, the circumferentially extending holes in the two tubes are substantially aligned.

The cited references do not include each of the features claimed. It is admitted in the office action that Dunlap does not suggest or disclose holes formed in the tube wall. Further, the openings in Powell -- identified in the present action as hoes 25 and 110 -- do not extend circumferentially, but rather are elongated axially. As discussed above, the Adams reference also does not suggest or disclose a circumferentially extending hole in a tube wall. Thus, the proposed combination cannot suggest the claimed invention, because each of the elements of the claims is not disclosed. In addition, there is no suggestion to modify any of the references to include the missing claim elements. As such, the Dunlap, Powell and Adams references do not render the claims obvious.

In addition to the above, there is no suggestion in the cited references to modify the structures disclosed therein to create the specifically claimed combination. The claims are something more than a mere combination of elements. In order for a claimed invention to be rendered obvious, there must be some suggestion to combine the claimed elements or some suggestion of the advantages for making that combination. Hindsight reconstruction of a claim is not permitted.


In the case of Dunlap, there is no suggestion or disclosure of a start-up groove, let alone the form of such a groove. In Powel, the start-up groove is formed by the ring 100 that is positioned in the channel formed adjacent the outer end of the tube. The ring insert is retained on the end of the tube by an end cap. There is no hole formed in the tube, there is only one in the end cap. The corresponding hole in the ring is provided as a visual indication of alignment. It is not for inserting of a start-up groove. In Adams, the start-up operation is completed by placing the end of the yarn across the axial end of the tube, and insertion of the yarn into the V-shaped notch. In the present invention, the start-up groove is formed on the circumferential surface and the yarn is laid across this surface. In the high speed operation of winding yarn this difference is significant. There is no suggestion to modify the operation of Adams to function in the manner claimed.

In addition to the above, claims 41 and 42 stand rejected based upon Dunlap in combination with Powell or Adams, and in further view of Qiu et al (US 5,505,395). With our reference to the merits of the dependant claims, these two claims are patentable for the same reasons expressed above. The Qiu reference does not present any of the elements missing from the primary references. Qiu merely shows a multi layer tube, made of various materials.

With reference to the additional reference identified in the "Conclusion" section-- but not relied upon in rejecting the claims, the references have been considered with respect to the claims, as amended. It is respectfully submitted that these additional references do not suggest or disclose the invention as specifically claimed. None of the prior art of record renders any of the claims not patentable.

It is respectfully submitted that the claims as pending are in condition for allowance. Moreover, the independent claims are generic to a number of species identified in the prior office action. As such, a number of additional claims should be allowed along with those specifically under consideration. A notice of allowance is solicited.

Respectfully submitted,



Thomas J. Durling
Reg. No. 31,349

DLA Piper Rudnick Gray Cary US LLP
One Liberty Place, Suite 4900
1650 Market Street
Philadelphia, PA 19103
Phone: (215) 656-2431
Fax: (215) 656-2498
thomas.durling@dlapiper.com